

ABSTRACT OF THE DISCLOSURE:

The invention is a procedure for measuring the binding of an entity (ligand) to a

4 surface by using a hapten-conjugated version of the ligand (hapten-ligand). An excess of the hapten-ligand is presented to the binding surface and excess (unbound) hapten-ligand is washed off. Bound hapten-ligand is then solubilized (removed) and applied to a membrane support or separated by electrophoresis and applied to a membrane support.

8 Standard amounts of hapten-ligand are similarly applied to the membrane. The membrane-bound hapten-ligand is detected by application of an enzyme-conjugated antibody to the hapten; or by application of an antibody to the hapten followed by application of an enzyme-conjugated antibody to the anti-hapten antibody. The resultant

12 membrane-associated enzyme is detected and quantitated by the application of a color or light-producing substrate which reacts with the enzyme. A combination of the use of anti-hapten antibodies along with membrane-blotting technologies to assess hapten-ligand binding to surfaces is not found in the scientific or patent literature, particularly in

16 regards to assessing protein binding to cell surfaces.

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Title: Method for the Detection and Measurement of Hapten-Conjugated Biological Binding Entities by Western and Dot Blot using Anti-Hapten Antibodies. Text: 28 pages total. Figures: 12 pages total.